

**ENGINEERING CHANGE NOTICE**  
**DART AEROSPACE LTD**

|               |               |             |             |              |        |         |
|---------------|---------------|-------------|-------------|--------------|--------|---------|
| Date:         | 16.07.26      | Job No.:    | ADR Yes/No: | ADR Date:    | ECN #: | 16- 617 |
| Product No.:  | Apical 135-21 | Created By: | KJ          | Approved By: |        |         |
| Product Name: | Cable Cutters | Checked By: |             |              |        |         |

| Distribution                           | Reqd | Resp     | Initial /<br>Date (YY/MM/DD) |
|--|------|----------|------------------------------|
| Director of Operations                 | N    | DM       |                              |
| Production Manager / Coord.            | Y    | MP / MF  |                              |
| Purchasing Manager / Purchasing Coord. | N    | LL / CL  |                              |
| Production Engineering Coord.          | Y    | DD / JLM |                              |
| Production Engineering Coord.          | N    | DL       |                              |
| Customer Order Processing              | N    | SL / BG  |                              |

| Distribution               | Reqd | Resp    | Initial /<br>Date (YY/MM/DD) |
|----------------------------|------|---------|------------------------------|
| DQA / QA Coord.            | Y    | PS / ED |                              |
| QC Coordinator             | Y    | PD      |                              |
| Customer Support           | Y    | SW / LM |                              |
| Customer Technical Support | Y    | MB / HS |                              |
| Marketing                  | N    | SL / WR |                              |
| Dist. Management Coord.    | N    | HM      |                              |

**Reason for Change:**

Added note 10

**Documents Affected:**

Release 647.7300 Rev B1

IF APPLICABLE:    NCR: \_\_\_\_\_    PAR: \_\_\_\_\_    CAR: \_\_\_\_\_    CIR: \_\_\_\_\_    URF: \_\_\_\_\_

PAPERWORK UPDATE    ☐    PARTS MUST COMPLY    ☒    PREVIOUS PARTS SATISFACTORY    ☐

| # | Quality Assurance Actions                | Reqd | Resp | Notes | Complete |
|---|--|------|------|-------|----------|
| 1 | Notify Previous Customers                | N    |      |       |          |
| 2 | Notify Eurocopter France                 | N    |      |       |          |
| 3 | Notify Augusta Westland                  | N    |      |       |          |
| 4 | Manufacturing Licensing Agreement Update | N    |      |       |          |

| #  | Engineering Actions                                      | Reqd | Resp | Notes | Complete |
|----|--|------|------|-------|----------|
| 5  | Required Documents/Drawings/Item ID's Under Review (URF) | N    |      |       |          |
| 6  | Update Master Document List (MDL)                        | N    |      |       |          |
| 7  | Update Document Record (DR)                              | N    |      |       |          |
| 8  | Update Product Compatability Matrix                      | N    |      |       |          |
| 9  | Notify TC / FAA of Change (eg. ICA, 8110-3)              | N    |      |       |          |
| 10 |  |      |      |       |          |

| #  | Document Control Actions   | Reqd | Resp | Notes | Complete |
|----|--|------|------|-------|----------|
| 11 | Move / Update Electronic Files / Design Journal                      | N    |      |       |          |
| 12 | Update Product Specification Files (Bluefiles)                       | N    |      |       |          |
| 13 | Update Approved/Preliminary Dwg PDF Files                            | Y    | KJ   |       | 16.07.26 |
| 14 | Update Product Development Summary (STC applications)                | N    |      |       |          |
| 15 | Update QSI 021 (TC/FAA STC) and/or STC Approval List                 | N    |      |       |          |
| 16 | Create/Update Parts / STC Database                                   | N    |      |       |          |
| 17 | Update / Verify Airworthiness Release Certificate Database           | N    |      |       |          |
| 18 | Create / Update Change Record Form / Item Card Database              | N    |      |       |          |
| 19 | Create / Update Packaging Process Plan (PPP)                         | N    |      |       |          |
| 20 | Red Decals required on Packaging Process Plan (PPP)?                 | N    |      |       |          |
| 21 | Update Controlled Supplier Documents (Qpulse) Database               | N    |      |       |          |
| 22 | Update Grey Project Binder / Electronic Project Folder               | N    |      |       |          |
| 23 | Update D-Part / M-Drawing / DSI / DEO Master Binders                 | N    |      |       |          |
| 24 | Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's) | N    |      |       |          |
| 25 |  |      |      |       |          |

**Description / Action:**

Update BOM's and Routes per latest approved drawing

ECN Verified & Complete: \_\_\_\_\_ Date: \_\_\_\_\_

## **Linda Lacelle**

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**From:** Jean-Luc Menard  
**Sent:** Wednesday, July 27, 2016 10:55 AM  
**To:** Linda Lacelle  
**Subject:** RE: ECN16-617

NO,THEY JUST added a length for a seal on the dwg.  
JL

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**From:** Linda Lacelle  
**Sent:** Wednesday, July 27, 2016 10:27 AM  
**To:** Jean-Luc Menard <jmenard@dartaero.com>  
**Subject:** ECN16-617

Is there anything we need to update on this one??

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |  |  |  |  |  |  |   |  |  |
|--|--|--|--|--|--|--|---|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |  |  |   |  |  |
| Date :   |  | Step #:  |  | QTY Effective :  |  |  | <b>MRB (QS1042) Approval</b><br><br><div style="border: 1px solid black; height: 150px; margin-top: 10px;"></div> |  |  |
| Description Work Order Deviation                             |  |  |  | Disposition  |  |  |   |  |  |
|  |  |  |  |  |  |  |   |  |  |
|  |  |  |  |  |  |  |   |  |  |
|  |  |  |  |  |  |  | Completed By  |  |  |
|  |  |  |  |  |  |  | Lead hand / Supervisor<br>Approval Verification   |  |  |
|  |  |  |  |  |  |  | QC / QA Coordinator<br>Approval   |  |  |

  

|                                      |                                 |                                   |  |                                       |                                   |   |   |                              |                                     |   |  |   |                                   |                                       |                                   |                                   |  |   |                                  |  |  |  |                                   |  |                                  |  |                                 |   |                                |                                   |                                     |   |  |   |                                 |                                    |   |  |  |                                      |  |  |                                      |   |  |                                |                               |   |  |                                  |                                     |                                       |  |   |   |   |   |  |                                     |                                  |                                 |                                  |   |
|--------------------------------------|---------------------------------|-----------------------------------|--|---------------------------------------|-----------------------------------|---|---|------------------------------|-------------------------------------|---|--|---|-----------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|--|---|----------------------------------|--|--|--|-----------------------------------|--|----------------------------------|--|---------------------------------|---|--------------------------------|-----------------------------------|-------------------------------------|---|--|---|---------------------------------|------------------------------------|---|--|--|--------------------------------------|--|--|--------------------------------------|---|--|--------------------------------|-------------------------------|---|--|----------------------------------|-------------------------------------|---------------------------------------|--|---|---|---|---|--|-------------------------------------|----------------------------------|---------------------------------|----------------------------------|---|
| Root Cause                           |                                 |                                   |  | FAULT CATEGORY                        |                                   |   |   |                              |                                     |   |  |   |                                   |                                       |                                   |                                   |  |   |                                  |  |  |  |                                   |  |                                  |  |                                 |   |                                |                                   |                                     |   |  |   |                                 |                                    |   |  |  |                                      |  |  |                                      |   |  |                                |                               |   |  |                                  |                                     |                                       |  |   |   |   |   |  |                                     |                                  |                                 |                                  |   |
| Environment <input type="checkbox"/> | Design <input type="checkbox"/> | Doc/Data <input type="checkbox"/> | Equip/Tooling <input type="checkbox"/> | Handling/Pre <input type="checkbox"/> | Material <input type="checkbox"/> | Internal Transport <input type="checkbox"/> | Tribal Knowledge <input type="checkbox"/> | LOA <input type="checkbox"/> | Substation <input type="checkbox"/> | Past Expiry Date <input type="checkbox"/> | Misidentified <input type="checkbox"/> | No Re-verification <input type="checkbox"/> | Operator <input type="checkbox"/> | Offset/Setup <input type="checkbox"/> | Supplier <input type="checkbox"/> | Training <input type="checkbox"/> | Use for Testing <input type="checkbox"/> | Poor Information <input type="checkbox"/> | Rushing <input type="checkbox"/> | Product Improvement <input type="checkbox"/> | Process Improvement <input type="checkbox"/> | Manufacturing Process <input type="checkbox"/> | Past Due <input type="checkbox"/> | Pressure/Forced <input type="checkbox"/> | Bending <input type="checkbox"/> | Centre Not Concentric <input type="checkbox"/> | Cracks <input type="checkbox"/> | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Cuffs <input type="checkbox"/> | Crushing <input type="checkbox"/> | Heat Treat <input type="checkbox"/> | Wave/Twist in Tube <input type="checkbox"/> | Marks/Chatter <input type="checkbox"/> | Temperature/Cure <input type="checkbox"/> | Set-up <input type="checkbox"/> | BOM/Route <input type="checkbox"/> | Broken/Damage/Defect <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Contamination <input type="checkbox"/> | Countersink <input type="checkbox"/> | Cut Too Short <input type="checkbox"/> | Instructions Incomplete/Unclear <input type="checkbox"/> | Drill Holes <input type="checkbox"/> | Power Loss/Surge <input type="checkbox"/> | Folio/Program <input type="checkbox"/> | Grain <input type="checkbox"/> | Weld <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/> | Out of Sequence <input type="checkbox"/> | Off-set <input type="checkbox"/> | Mislabeled <input type="checkbox"/> | Fit/Function <input type="checkbox"/> | Misaligned/off center <input type="checkbox"/> | Positioned Wrong <input type="checkbox"/> | Outside Dimensions <input type="checkbox"/> | Over/Under tolerance <input type="checkbox"/> | Part Incorrect <input type="checkbox"/> | Part Lost/Missing <input type="checkbox"/> | Part Moved <input type="checkbox"/> | Drawing <input type="checkbox"/> | Finish <input type="checkbox"/> | Misread <input type="checkbox"/> | Turning Sequence <input type="checkbox"/> |
|                                      |                                 |                                   |  |                                       |                                   |   |   |                              |                                     |   |  |   |                                   |                                       |                                   |                                   |  |   |                                  |  |  |  |                                   | OTHER : <input type="checkbox"/>         |                                  |  |                                 |   |                                |                                   |                                     |   |  |   |                                 |                                    |   |  |  |                                      |  |  |                                      |   |  |                                |                               |   |  |                                  |                                     |                                       |  |   |   |   |   |  |                                     |                                  |                                 |                                  |   |